

IN THE CLAIMS

Page 3 line 1, change "PATENT CLAIMS" to --What is claimed is:--.

Cancel claims 1-5 and add new claims 6-13, reading as follows:

--6. (new) A microscope, especially for inspection during semiconductor manufacture comprising:

a pulsed laser for illumination, said laser being in the UV range; and

at least one rotating diffusion disk is arranged behind the laser for the

homogenization of the illumination.

7. (new) The microscope according to claim 6, including two diffusion disks rotating in opposite directions arranged directly or indirectly behind each other in the illumination ray path.

8. (new) The microscope according to claim 6, wherein the diffusion disk is either of a granulated or of a holographically produced design.

9. (new) The microscope according to claim 6, with a rotation speed of at least such a magnitude that a rotation by at least one grain size and/or the resolution limit of a holographically generated structure or by the length of a structure takes place between two laser pulses.

10. (new) The microscope according to claim 6, with an illumination laser wavelength which essentially corresponds to the illumination wavelength during the manufacture of semiconductors.

11. (new) The microscope according to claim 10, wherein the illumination wavelength is in the range of 193nm or 248nm or 266nm or 366nm, all with a tolerance of +/-2nm.

12. (new) An inspection device for use in semiconductor manufacture comprising:

a laser module with pulsed UV laser;

UP
a transmitter port;
MI
a microscope having at least one rotating diffusion disk arranged behind the
laser for the homogenization of the illumination;

ST
a scanning table;
KA
a CCD camera;
BS
a screen; and
MC
a microscope controller.

13. (new) In an inspection device for use in semiconductor manufacture,
MI
having a microscope, an improvement comprising that said laser is a pulsed laser in the UV
range and at least one rotating diffusion disk is arranged behind the laser for the
homogenization of the illumination.--

IN THE ABSTRACT OF THE DISCLOSURE

Cancel the present Abstract of the Disclosure and substitute therefor the enclosed
Abstract of the Disclosure which is attached to the substitute specification.

REMARKS

Claims 1-5 have been cancelled and new claims 6-13 have been added.
The amendments to the claims have been made only to improve the form of the claims for
examination purposes.

The specification and abstract have been amended to conform it to U.S. format.

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